



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : G06F 17/60		A1	(11) International Publication Number: WO 98/39716 (43) International Publication Date: 11 September 1998 (11.09.98)
(21) International Application Number: PCT/US98/03495 (22) International Filing Date: 25 February 1998 (25.02.98)		(81) Designated States: AU, BR, CA, JP, KR, MX, NZ, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(30) Priority Data: 08/812,825 6 March 1997 (06.03.97) US		Published <i>With international search report.</i>	
(71) Applicant: ELECTRONIC DATA SYSTEMS CORPORATION [US/US]; 5400 Legacy Drive, Mail Stop H3-3A-05, Plano, TX 75024 (US).			
(72) Inventor: HODGE, Paulette, G.; 4141 Sunset Court, Ann Arbor, MI 48103 (US).			
(74) Agent: GRIEBENOW, L., Joy; Electronic Data Systems Corporation, 5400 Legacy Drive, H3-3A-05, Plano, TX 75024 (US).			
(54) Title: SYSTEM AND METHOD FOR COORDINATING POTENTIAL EMPLOYERS AND CANDIDATES FOR EMPLOYMENT			
<pre> graph LR I1[12 I/F] --> D1[14] I2[24 I/F] --> D2[26] D1 --> P[PROCESSOR] D2 --> P P --> D3[34] P --> I3[36 I/F] </pre>			
(57) Abstract <p>A system (10) is provided for coordinating a potential employer and a candidate for employment. The system includes an interface (12, 24) which receives candidate information (14) and requirement information (26). The candidate information (14) specifies at least one qualification of the candidate. The requirement information (26) specifies at least one requirement for an available position being offered by the potential employer. A processor (30) is coupled to the interface (12, 24). The processor (30) compares the candidate information (14) with the requirement information (26) in order to determine whether the candidate is suitable for the available position.</p>			

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

SYSTEM AND METHOD FOR COORDINATING POTENTIAL
EMPLOYERS AND CANDIDATES FOR EMPLOYMENT

TECHNICAL FIELD OF THE INVENTION

5 This invention relates generally to the field of computer software systems, and more particularly, to a system and method for coordinating potential employers and candidates for employment.

BACKGROUND OF THE INVENTION

Despite the number of job openings available at many companies, firms, businesses, and other potential employers, many people are still haunted by the specter 5 of unemployment or feel trapped at jobs which they do not enjoy. In many cases, it is difficult for such people to identify potential employers having available positions. Even after they have identified potential employers, 10 these people seeking work must contact each employer separately, often just to learn that they are under-qualified, over-qualified, or otherwise not suited for the position. This process can be frustrating and disheartening.

Also, it is difficult for a potential employer to 15 identify candidates qualified to fill an available position. For example, many potential employers depend upon a human resource staff to individually review résumés submitted by various candidates. The number of résumés received for a particular position can be overwhelming. In addition, during such a review process, 20 each candidate's qualifications (as stated on that candidate's résumé) must be compared against a list of requirements, which, in many cases, is very extensive. To further exacerbate the situation, the qualifications 25 stated by each candidate on his or her résumé should be verified for accuracy. Given this daunting task, errors are often made. As a result of these errors, some qualified candidates may be rejected while some unqualified candidates may be accepted.

SUMMARY OF THE INVENTION

From the foregoing, it may be appreciated that a need has arisen for a system and method for coordinating potential employers with suitable candidates.

According to an embodiment of the present invention, a system and method are provided for coordinating a potential employer and a candidate for employment. In the system and method, an interface receives candidate information and requirement information. The candidate information specifies at least one qualification of the candidate. The requirement information specifies at least one requirement for an available position being offered by the potential employer. A processor is coupled to the interface. The processor compares the candidate information with the requirement information in order to determine whether the candidate is suitable for the available position.

According to another embodiment of the present invention, a system is provided for coordinating potential employers and candidates for employment. The system includes an interface which receives candidate information and requirement information. The candidate information specifies a qualification for each of a plurality of candidates. The requirement information specifies a requirement for each of a plurality of available positions being offered by at least one potential employer. A processor is coupled to the interface. The processor generates match information in response to the candidate information and the requirement information.

Important technical advantages of the present invention include a system and method for coordinating potential employers with suitable candidates for employment. This is accomplished by receiving requirement information from one or more potential employer and candidate information from one or more

candidates. For each position available at a potential employer, the requirement information specifies various requirements. For each candidate for employment, the candidate information may specify, among other things, 5 the candidate's identity, qualifications, skills, and preferences. The requirement information and the candidate information are stored in the same or separate databases. A processor compares the requirement information against the candidate information in order to 10 identify suitable candidates for each available position at a potential employer. Accordingly, human error is substantially reduced or eliminated.

Another important technical advantage of the present invention includes providing an override feature in the 15 automated system and method for coordinating potential employers and candidates for employment. The override feature allows the requirement information of a potential employer to be modified if the number of candidates which have been identified as meeting the requirements is too 20 few or too many.

Yet another important technical advantage of the present invention includes providing a central location for consolidating requirement information from a number 25 of potential employers and candidate information from a number of candidates. The consolidated requirement and candidate information can be utilized by various interested parties (including both the potential employers and the candidates themselves) to generate match information. For each interested party, the match 30 information can be output in a format that accommodates the needs of that party. Thus, each potential employer is able to identify all candidates which meet the requirements for a particular position being offered by that employer, and each candidate is able to identify all 35 positions for which he or she is qualified. Also, agencies (e.g., a government unemployment agency) can

identify positions for unemployed individuals who are seeking work.

Still another technical advantage of the present invention includes providing a mechanism whereby a human resources department of an employing entity (e.g., corporation, firm, etc.) can be converted into a revenue generating center for the employing entity. The human resources department can set-up, operate, and maintain the system and method of the present invention. The human resources department may then charge each interested party described above, including potential employers and candidates, fees for use of this system and method. Thus, the human resources department becomes a revenue generating center.

Other important technical advantages are readily apparent to one skilled in the art from the following figures, description, and claims.

BRIEF DESCRIPTION OF THE DRAWINGS

For a more complete understanding of the present invention and for further features and advantages, reference is now made to the following description taken 5 in conjunction with the accompanying drawings, in which:

FIGURE 1 illustrates an exemplary system for coordinating potential employers and candidates for employment, in accordance with an embodiment of the present invention;

10 FIGURE 2 illustrates an exemplary computer-based system that can be used to implement the coordinating system shown in FIGURE 1;

15 FIGURE 3 is a flow chart of an exemplary method for receiving candidate information, according to an embodiment of the present invention;

FIGURE 4 is a flow chart of an exemplary method for receiving requirement information, according to an embodiment of the present invention; and

20 FIGURE 5 is a flow chart of an exemplary method for coordinating potential employers and candidates for employment, according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The preferred embodiment of the present invention and its advantages are best understood by referring to FIGURES 1-5 of the drawings, like numerals used for like and corresponding parts of the various drawings.

Turning first to the nomenclature of the specification, the detailed description which follows is represented largely in terms of processes and symbolic representations of operations performed by conventional computer components, such as a central processing unit ("CPU") or processor associated with a general purpose computer system, memory storage devices for the processor, and connected pixel-oriented display devices. These operations include the manipulation of data bits by the processor and the maintenance of these bits within data structures resident in one or more of the memory storage devices. Such data structures impose a physical organization upon the collection of data bits stored within computer memory and represent specific electrical or magnetic elements. These symbolic representations are the means used by those skilled in the art of computer programming and computer construction to most effectively convey teachings and discoveries to others skilled in the art.

For purposes of this discussion, a process, method, routine, or sub-routine is generally considered to be a sequence of computer-executed steps leading to a desired result. These steps generally require manipulations of physical quantities. Usually, although not necessarily, these quantities take the form of electrical, magnetic, or optical signals capable of being stored, transferred, combined, compared, or otherwise manipulated. It is conventional for those skilled in the art to refer to these signals as bits, values, elements, symbols, characters, text, terms, numbers, records, files, or the like. It should be kept in mind, however, that these and

some other terms should be associated with appropriate physical quantities for computer operations, and that these terms are merely conventional labels applied to physical quantities that exist within and during 5 operation of the computer.

It should also be understood that manipulations within the computer are often referred to in terms such as adding, comparing, moving, or the like, which are often associated with manual operations performed by a 10 human operator. It must be understood that no involvement of the human operator may be necessary, or even desirable, in the present invention. The operations described herein are machine operations performed in conjunction with a human operator or user that interacts 15 with the computer or computers.

In addition, it should be understood that the programs, processes, methods, and the like, described herein are but an example of one implementation of the present invention and are not related or limited to any 20 particular computer, apparatus, or computer language.

Rather, various types of general purpose computing machines or devices may be used with programs constructed in accordance with the teachings described herein. Similarly, it may prove advantageous to construct a 25 specialized apparatus to perform the method steps described herein by way of dedicated computer systems with hardwired logic programs stored in non-volatile memory, such as read-only memory (ROM).

Referring now to the drawings, FIGURE 1 illustrates 30 a system 10 for coordinating potential employers and candidates for employment, according to an embodiment of the present invention. It is contemplated that coordinating system 10 may be maintained, used, and/or operated by any one or a combination of potential 35 employers, candidates for employment, career centers at various academic institutions, government agencies,

employment agencies, professional recruiters, or any other entity, organization, or agency seeking to coordinate the employment of suitable candidates by one or more potential employers.

5 Coordinating system 10 includes a first interface (I/F) 12, the functionality of which can be performed by one or more suitable input devices, such as a key pad, touch screen, input port, pointing device (e.g., mouse), and/or other device that can accept information, and one
10 or more suitable output devices, such as a computer display, output port, speaker, or other device, for conveying information associated with the operation of coordinating system 10, including digital data, visual information, or audio information. In one embodiment,
15 first interface 12 may comprise a computer-telephone interface (CTI), or the like, which allows coordinating system 10 to communicate with a remote database or computer system, such as a database at a university for maintaining records of enrollment and grades. First
20 interface 12 may also include an artificial intelligence engine interface, such as, for example, a RESUMIX™ system manufactured by Resumix of Santa Clara, California, operable to scan information from a résumé. First
25 interface 12 functions primarily to receive and forward candidate information 14.

25 Candidate information 14 comprises various information relating to any one or more candidates for employment, such as college students, college graduates, workers who have been laid off, people desiring a career change, or any other person seeking employment. For each candidate for employment, candidate information 14 may specify the candidate's name, home address and telephone number, and work address and telephone number (if applicable). Candidate information 14 may include qualification information 16, skill information 18, and preference information 20 for each candidate.

Qualification information 16 may specify a candidate's qualifications or credentials for employment. This includes information about the candidate's education, such as institution of learning (e.g., college, 5 university, technical school, vocational school, etc.), grades, honors, awards, distinctions, accomplishments, activities, or any other suitable information relating to the education of a candidate. Qualification information 16 may also include information about a candidate's present or previous employment, such as name of employer, 10 job description, years of experience, duties at such employment, responsibilities, distinctions at work, etc. Furthermore, qualification information 16 may also specify any licenses (e.g., medicine, dentistry, or law), 15 certifications (e.g., certified public accountant (CPA) certification), ability to speak foreign languages, or the like, which may be desirable in a candidate. For each candidate, skill information 18 includes any information relating to or specifying the candidate's 20 skills or abilities, such as interpersonal skills, management skills, organizational skills, presentation skills, public speaking skills, etc. Skill information 18 can be generated by any suitable evaluator, such as a college or university's placement office. Preference 25 information 20 includes any information relating to the preferences of a candidate. This may include preferences for a particular city or region, type of work, salary, willingness to travel, etc. In some cases, candidate information 14 may also specify personal information, 30 such as ethnic background, gender, and the like, about a candidate.

A candidate information memory 22 is coupled to first interface 12. Candidate information memory 22 may reside in a suitable storage medium, such as random 35 access memory (RAM), ROM, disk, tape storage, or other suitable volatile and/or non-volatile data storage

system. Candidate information memory 22 can be a relational database. Candidate information memory 22 receives, stores, and forwards candidate information 14. Separate qualification information 16, skill information 18, and preference information 20 can be maintained, and retrieved as necessary, for each candidate for employment.

A second interface 24 is provided for inputting, retrieving, and forwarding requirement information 26. Like first interface 12, the functionality of second interface 24 can be performed by one or more suitable input devices, such as a key pad, touch screen, input port, pointing device (e.g., mouse), and/or other device can that accept information, and one or more suitable output devices, such as a computer display, output port, speaker, or other device, for conveying information associated with the operation of coordinating system 10, including digital data, visual information, or audio information. Second interface 24 may comprise a computer-telephone interface for receiving information from a remote source. Second interface 24 can be the same or separate from first interface 12.

Requirement information 26 received at second interface 24 generally includes information relating to the requirements of one or more potential employers for available positions. These potential employers can be any business (e.g., company, corporation, firm, partnership, etc.), organization (e.g., charity or foundation), institution (e.g., university or church), department or branch of government, or similar entity, or group or department within the same, that may have positions available for employment. For each available position, requirement information 26 specifies various requirements for the position. Thus, requirement information 26 may specify academic requirements (e.g., academic institution, degree grade point, honors), work

requirements (e.g., position and years of experience),
licenses or certifications (e.g., commercial driving
license, medical license, bar license, CPA), ability to
speak a foreign language, necessary skills (e.g.,
5 interpersonal, organization, management, public speaking)
and the like. Requirement information 26 may also
specify the position available (e.g., intern, coop, entry
level, management position), location or situs for
position (including city, state, and/or region), salary
10 and/or other compensation, and the like. In some
instances, requirement information 26 can specify
preferences, such as, for example, minority or gender.
In one embodiment, coordinating system 10 may be operated
in conjunction with a "System and Method for Modeling
15 Skills," such as that described in U.S. Patent Application
Serial No. 08/594,563, filed on January 31, 1996 by
Rosenthal, et al.; in such case, requirement information
26 may specify one or more objects, actions, and
contexts, as described therein.

20 A requirement information memory 28 is coupled to
second interface 24. Requirement information memory 28
may reside in a suitable storage medium, such as RAM,
ROM, disk, tape storage, or other suitable volatile
and/or non-volatile data storage system. Requirement
25 information memory 28 can be a relational database.
Requirement information memory 28 receives, stores, and
forwards requirement information 26 from second interface
24. This requirement information 26 can be retrieved and
forwarded as necessary.

30 A processor 30 is coupled to candidate information
memory 22 and requirement information memory 28. The
functionality of processor 30 can be performed by any
suitable processor, such as a main-frame, file server,
work station, or other suitable data processing facility
35 running appropriate software. Processor 30 is operable
to retrieve candidate information 14 (including

qualification information 16, skill information 18, and preference information 20) and requirement information 26 from candidate information memory 22 and requirement information memory 28, respectively. In one embodiment, 5 processor 30 may be operable to verify the accuracy of candidate information 14. Processor 30 also functions to compare candidate information 14 with requirement information 26 in order to determine whether any candidates specified in the candidate information 14 are 10 suitable for positions specified in requirement information 26. After performing the comparison, processor 30 outputs match information 32. This match information 32 may specify which candidates are most suitable for the positions being offered by various 15 potential employers. Match information 32 may be organized or configured in various formats to accommodate the needs of a user of coordinating system 10. For example, if the user is a potential employer, match information 32 may comprise a list of all suitable 20 candidates for one or more positions being offered by the potential employer. If the user is a candidate for employment, employment information 32 may comprise a list of all available positions for which the candidate is qualified.

25 A match information memory 34 is coupled to processor 30. Match information memory 34 may reside in a suitable storage medium, such as RAM, ROM, disk, tape storage, or other suitable volatile, or non-volatile data storage system, which may be separate or same from the 30 data storage system(s) containing candidate information memory 22 and requirement information memory 28. Match information memory 34 receives, stores, and forwards match information 32 generated by processor 30.

A third interface 36 is also coupled to processor 35 30. Like first interface 12 and second interface 24, the functionality of third interface 36 can be performed by

one or more suitable input devices, such as a key pad, touch screen, input port, pointing device, and/or other device that can accept information, and one or more suitable output devices, such as a computer display, 5 output port, speaker, or other devices, for conveying information, including digital data, visual information, or audio information. Third interface 36 may be the same or separate from first interface 12 and/or second interface 24. Third interface 36 functions primarily to 10 display or otherwise present match information 32 to a user after this information has been generated by processor 30.

In one embodiment, third interface 36 can be used by an operator or user to modify requirement information 26 15 if the match information 32 generated by processor 30 proves to be unsatisfactory. For example, if match information 32 specifies a relatively large number of candidates for a particular position (e.g., eighty-eight candidates out of a pool of ninety are listed), then requirement information 26 may be further restricted in 20 order to reduce the number of candidates that will appear in match information 32 after another comparison by processor 30. Likewise, if match information 32 specifies a relatively small number of candidates for a 25 particular position (e.g., five candidates out of a pool of a thousand are listed), then the requirement information 26 may be modified to "loosen" the requirements for that position.

The present invention contemplates that coordinating 30 system 10 may be maintained and operated by any one or a combination of parties interested in matching suitable candidates to available positions at one or more potential employers. For example, coordinating system 10 can be operated by a career center of an academic 35 institution which desires to find internships, co-op positions, or permanent employment for its students or

graduates. Similarly, the system can be used by a government agency, such as an unemployment office, to find positions for the unemployed. Likewise, a human resource department of a large corporation may operate 5 coordinating system 10 to identify candidates who are qualified to fill one or more positions available at the corporation. Furthermore, these interested parties may cooperate to input and receive information from coordinating system 10, such as, for example, by 10 providing or supporting direct electronic links for the transfer of information. For widespread access, coordinating system 10 may be coupled to the interconnection of computers known as the Internet, for example, by one or a combination of an Integrated 15 Services Digital Network (ISDN), communications line, a hard-wire line, a fiber-optic line, a telephone link, or any other suitable means.

Accordingly, in operation, candidate information 14 (including qualification information 16, skill 20 information 18, and preference information 20) may be entered at first interface 12, for example, by candidates, potential employers, employment agencies, career centers, etc. This information is stored in candidate information memory 22. Requirement information 25 26 is entered at second interface 24, for example, by potential employers or employment agencies. The requirement information 26 is stored in requirement information memory 28. Processor 30 retrieves and compares candidate information 14 against requirement 30 information 26 in order to generate match information 32, which may then be stored in match information memory 34. Match information 32 may be presented or displayed at third interface 36 so that this information may be 35 reviewed by the interested parties, such as candidates, potential employers, or the like. In some cases, if the match information 32 proves to be unsatisfactory,

requirement information 26 may be modified by a user of coordinating system 10 in order to generate different match information 32.

FIGURE 2 is a simplified diagram of an exemplary computer-based system 40 that can be used to implement coordinating system 10 shown in FIGURE 1. Referring to the embodiment shown in FIGURE 2, computer-based system 40 can include a process server 42, a data storage device 44, a computer 46, a plurality of work stations or desk top computers 48, and a local file server 50.

Process server 42 can be implemented as a SUN SOLARIS 2.3 system. Data storage device 44 can be a mass storage subsystem of tapes or disk drives, which is electronically coupled to process server 42. In one embodiment, a relational database resides in data storage device 44. Candidate information 14 (including qualification information 16; skill information 18, and preference information 20), requirement information 26, and match information 32 shown in FIGURE 1, can be contained in the relational database residing in data storage device 44. Process server 42 may retrieve, process, and store the information in the relational database.

Computer 46 may be linked electronically to process server 42 through a local area network (LAN) or a wide area network (WAN), for automated up-loading and down-loading of information therebetween. Any computer, which includes a central processing unit (CPU) and suitable RAM, ROM, and input/output (I/O) circuitry can be utilized for computer 46.

At least one work station 48 can be coupled to process server 42 by the same or a different LAN or WAN connecting computer 46. Preferably, each work station 48 is a desk top computer having at least a "486" processor or an operational equivalent. Work stations 48 may function to receive and display candidate information 14,

requirement information 26, and match information 32 to any user or operator of coordinating system 10, such as a potential employer or a candidate for employment.

Local file server 50 may be linked electronically to process server 42 by the same or a different LAN or WAN, or by telecommunications line through a modem (not specifically shown). Additionally, as shown for illustrative purposes only in FIGURE 2, process server 42 can be linked by a "gateway" interface communications processor to local file server 50. Local file server 50 is preferably connected to at least a second work station 48, which provides the same functionality as the first work station 48 previously described. Consequently, computer-based system 40 may provide a distributed network that allows interaction with coordinating system 10 at multiple locations.

Any one or a combination of interested parties (e.g., candidates for employment, potential employers, a career center of an academic institution, an employment agency, etc.) can use computer-based system 40 to collect, maintain, generate, or process candidate information 14, requirement information 26, and match information 32. This information can be collected at a number of different sites via a suitable work station 48, computer 46, local processor 42, or local file server 50. This information can then be relayed to a centralized location, such as process server 42, data storage device 44, or computer 46, for storage and analysis. Process server 42, computer 46, work stations 48, and local file server 50, either individually or in combination, can perform the functionality of processor 30 shown in FIGURE 1. Furthermore, because these devices are preferably linked together, each can directly access (e.g., store and retrieve) the candidate information 14, requirement information 26, and match information 32, if necessary.

FIGURE 3 is a flow chart of an exemplary method 100 for receiving and storing candidate information 14, according to an embodiment of the present invention. During the steps of method 100, a user of coordinating system 10, such as a candidate for employment, a potential employer, or an employment agency, may interact with the system, preferably via a suitable work station 48. For example, a user can input system commands and candidate information 14 by pressing appropriate keys (typing) on a key board or "clicking" on an option in a graphical user interface (GUI) display.

Method 100 begins at step 102 where system 10, via first interface 12, receives qualification information 16 for a particular candidate. This qualification information 16 may include any information relating to the qualifications or credentials of the candidate. Thus, for example, qualification information 16 may include information about the candidate's education (e.g., institution, grade-point, distinctions), previous or present employment (e.g., name of employer, job description, work experience), and licenses or certifications (e.g., medical license or commercial driving license).

In one embodiment, qualification information 16 for a candidate may be received from multiple sources. For example, qualification information 16 may be gleaned from a résumé submitted by the candidate. In one embodiment, first interface 12 comprises a RESUMIX™ system for scanning in information from a résumé. Furthermore, qualification information 16 can be down-loaded and received from a database maintained by a registrar's office at an academic institution which the candidate attended. For this purpose, first interface 12 may comprise a computer-telephone interface for transfer of information.

Processor 30 receives the qualification information 16 from first interface 12. At step 104, processor 30 may verify the accuracy of the candidate information 16, for example, by comparing information received from a résumé against information received directly from an academic institution. If the information from the résumé is inaccurate in light of the information received from an academic institution, then at step 106 the candidate is rejected, and accordingly, no additional information will be received for the candidate; method 100 moves to step 114.

On the other hand, if it is determined that the qualification information 16 is accurate, then at step 108 coordinating system 10 receives skill information 18, preferably at first interface 12. Skill information 18 may specify, among other things, a candidate's strength or weakness and various skills, such as management skills, presentation skills, interpersonal skills, etc. Skill information 108 may be received from a career office which administers a test to evaluate the candidate.

Coordinating system 10 receives preference information 20 at step 110. Preference information 20 generally relates to the preferences of the candidate. Preference information 20 may specify, among other things, desired position, location of job, career path, desired salary, willingness to travel, etc. Preference information 20 may be entered from a candidate's résumé or, alternatively, directly entered by the candidate.

At step 112, the qualification information 16, skill information 18, and preference information 20 received by coordinating system 10 are stored in candidate information memory 14. Candidate information memory 14 is preferably a relational database, and therefore all of this information may be accessible under the candidate's name or other appropriate identifier.

At step 114, coordinating system 10 queries whether there are more candidates for which candidate information 14 should be received. If there are more candidates, then coordinating system 10 returns to step 102 where it receives qualification information 16 for the next candidate. On the other hand, if it determined that there are no other candidates, then method 100 ends. Coordinating system 10 repeats steps 102-114 until candidate information 14, including qualification information 16, skill information 18, and preference information 20, has been received for all candidates for employment submitting candidate information 14, or requesting that candidate information 14 be submitted for consideration.

FIGURE 4 is a flow chart of an exemplary method 200 for receiving requirement information 26, according to an embodiment of the present invention. During the steps of method 200, a user of coordinating system 10 may communicate with the system, preferably via a work station 48.

Method 200 begins at step 202 where coordinating system 10 receives, at second interface 24, requirement information 26 for a particular position that is available. Requirement information 26 generally relates to the requirements that a potential employer has for the available position. Thus, for example, requirement information 26 may specify academic requirements (e.g., institution, degree, and grade point), previous employment (e.g., level of experience needed), licenses (e.g., medical or bar license), necessary skills (e.g., public speaking or organizational), location of job, and the like. At step 204, requirement information 26 is stored in requirement information memory 28.

At step 206, coordinating system 10 queries whether there are more available positions for which requirement information 26 should be received. If there are

additional positions, then coordinating system 10 returns to step 202 where requirement information 26 for another position is received. Otherwise, if there are no other positions for which requirement information 26 should be received, method 200 ends.

Coordinating system 10 repeats steps 202-206 until requirement information 26 for all positions available at one or more potential employers is entered into system 10 and stored within requirement information memory 28.

FIGURE 5 is a flow chart of an exemplary method 300 for coordinating candidates and potential employers, according to an embodiment of the present invention. During the steps of method 300, a user of coordinating system 10 communicates with the system, for example, by pressing appropriate keys (typing) on the key board of a work station 48 or "clicking" on an option in a GUI display. In one embodiment, method 300 corresponds to the operation of coordinating system 10, whereby match information 32 is generated.

Method 300 begins at step 302 where a position, which is available at a potential employer, is selected. Such potential employer may be any business, organization, institution, department/branch of government, or any other entity, or group or department within the same, having a position for employment available. The selection of an available position may be performed automatically--i.e., by processor 30 of coordinating system 10--or, alternatively, in response to a command by a user of the system. At step 304, processor 30 retrieves requirement information 26 for the selected position from requirement information memory 28.

Processor 30 retrieves candidate information 14 for the pool of candidates from candidate information memory 22 at step 306. This candidate information 14 may include qualification information 16, skill information 18, and preference information 20.

At step 308, processor 30 selects one of the candidates for which candidate information 14 has been retrieved. Processor 30 determines whether the selected candidate meets academic requirements for the available position at step 310. For example, this may be accomplished by comparing the qualification information 16 for such candidate against any academic requirements specified in requirement information 26. If the selected candidate does not meet academic requirements, processor 5 rejects the candidate at step 312; processor 30 then moves to step 318. On the other hand, if the selected candidate does meet academic requirements for the position at step 312, then at step 314 processor 30 determines whether the candidate meets skills requirement. This may be accomplished by comparing the required skills specified in requirement information 26 against skill information 18 that has been received for the candidate. Again, if the candidate does not meet the skills requirement, processor 30 rejects the candidate at 10 step 312. Otherwise, if the candidate does meet the skills requirement, then processor 30 determines at step 316 whether there is a suitable match between the candidate's preferences for a position (as specified in preference information 20) and the description of the position specified in requirement information 26. If the candidate's preferences are not suitably matched with the position, then processor 30 rejects the candidate at step 312. Otherwise, if the preferences are suitably matched, then processor 30 moves to step 318.

It should be understood that the determinations made at steps 310, 314, and 316 are provided by way of example only. The present invention contemplates that other determinations may be performed in addition to, or instead of, any of these exemplary determinations.

At step 318, processor 30 determines whether there are more candidates for employment which should be

considered for the available position. If there are additional candidates, processor 30 returns to step 308 when the next candidate is selected.

5 Coordinating system 10 repeats steps 308-318 until it has either rejected or accepted each candidate within the pool. Thus, when it is determined at step 318 that there are no additional candidates, processor 30 moves to step 320 where it generates a list of acceptable candidates for the position that has been selected. This
10 list constitutes match information 32 identifying all suitable candidates for the position. Match information 32 is stored in match information memory 34 and presented or displayed at third interface 36.

A user of system 10 may review the match information 15 32 in order to determine whether the number of matches is satisfactory. In some cases, match information 32 may specify more matches than are desirable, such as, for example, if almost all candidates in a pool are listed as a match for a particular position. In other cases, match
20 information 32 may not specify enough matches. In either case, it may be desirable to modify the requirement information 26 for the available position in order to produce a more satisfactory listing of matches.

Therefore, at step 322, coordinating system 10
25 queries a user whether override of the requirement information 26 is desired. If the user or operator elects to override requirement information 26, then at step 324, the requirement information 26 may be modified. For example, a user of coordinating system 10 may utilize
30 any suitable interface, such as third interface 36, to access and change requirement information 26. From step 324, coordinating system 10 may return to step 308 where the process of determining matches between the candidates and the available position is repeated using the modified
35 requirement information 26.

5 Steps 308-324 may be performed until match information 32 comprises a satisfactory list of candidates for the available position. Thus, when it is determined at step 322 that no override of requirement information 26 is necessary, method 300 ends.

10 Method 300 has been provided, by way of example only, to illustrate how the present invention can be used to identify suitable candidates for a particular position that is available. It should be understood, however, that the present invention is not limited to such an exemplary embodiment. For example, in another embodiment, the present invention can be used to identify suitable positions for a candidate seeking employment.

15 Although the present invention and its advantages have been described in detail, it should be understood that various changes, substitutions, and alterations can be made therein without departing from the spirit and scope of the invention as defined by the appended claims.

WHAT IS CLAIMED IS:

1. A system for coordinating a potential employer and a candidate for employment, the system comprising:
 - 5 an interface operable to receive candidate information and requirement information, the candidate information specifying at least one qualification of the candidate, the requirement information specifying at least one requirement for an available position being offered by the potential employer; and
 - 10 a processor coupled to the interface, the processor operable to compare the candidate information with the requirement information in order to determine whether the candidate is suitable for the available position.
- 15 2. The system of Claim 1, further comprising a memory operable to store the candidate information and the requirement information.
- 20 3. The system of Claim 1, wherein the candidate information comprises skills information specifying at least one skill of the candidate.
- 25 4. The system of Claim 1, wherein the candidate information comprises preference information specifying at least one preference of the candidate.
- 30 5. The system of Claim 1, wherein the interface is operable to allow a user to modify the requirement information.
6. The system of Claim 1, wherein the interface comprises a computer-telephone interface.

7. The system of Claim 1, wherein the interface comprises a computer-telephone interface operable to receive at least one of the candidate information and the requirement information from a remote location.

5

8. The system of Claim 1, wherein the interface comprises an artificial intelligence engine interface.

9. A system for coordinating potential employers and candidates for employment, the system comprising:
- an interface operable to receive candidate information and requirement information, the candidate information specifying a qualification for each of a plurality of candidates, the requirement information specifying a requirement for each of a plurality of available positions being offered by at least one potential employer; and
- 10 a processor coupled to the interface, the processor operable to generate match information in response to the candidate information and the requirement information.
- 15 10. The system of Claim 9, wherein the match information comprises a list of all candidates who are qualified for a particular available position.
- 20 11. The system of Claim 9, wherein the match information comprises a list of all available positions for which a particular candidate is qualified.
12. The system of Claim 9, wherein the interface is operable to allow a user to configure a format of the match information generated by the processor.

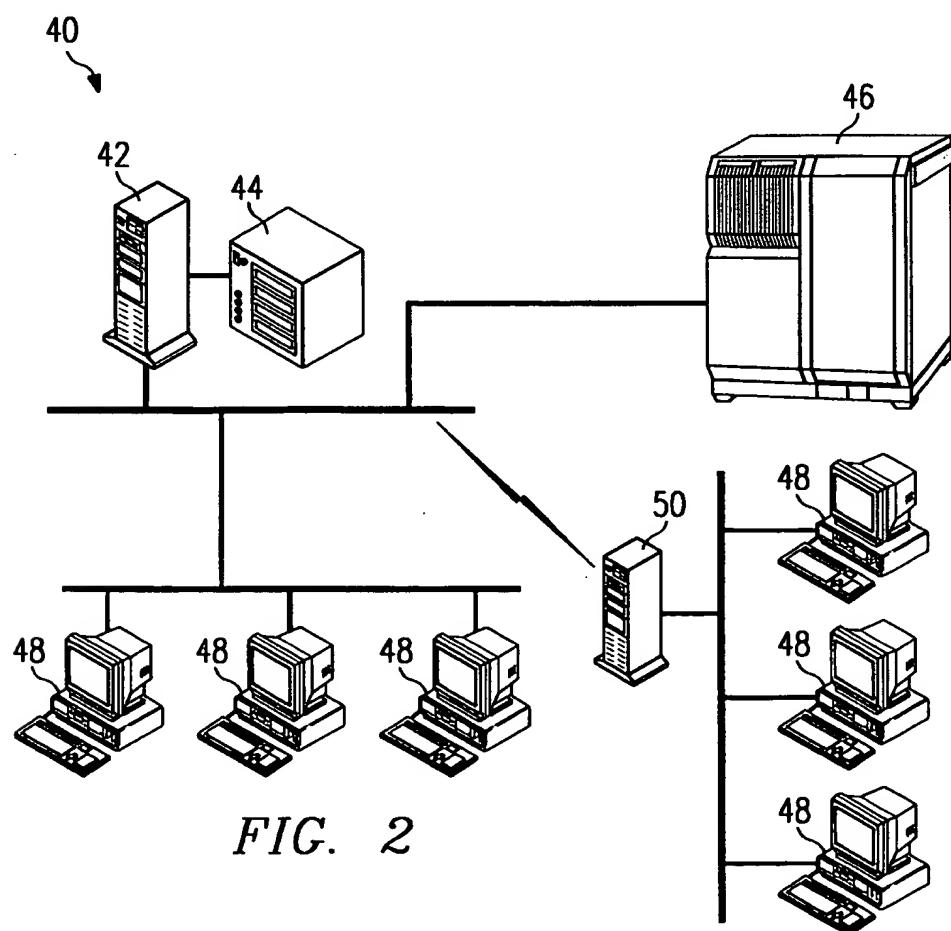
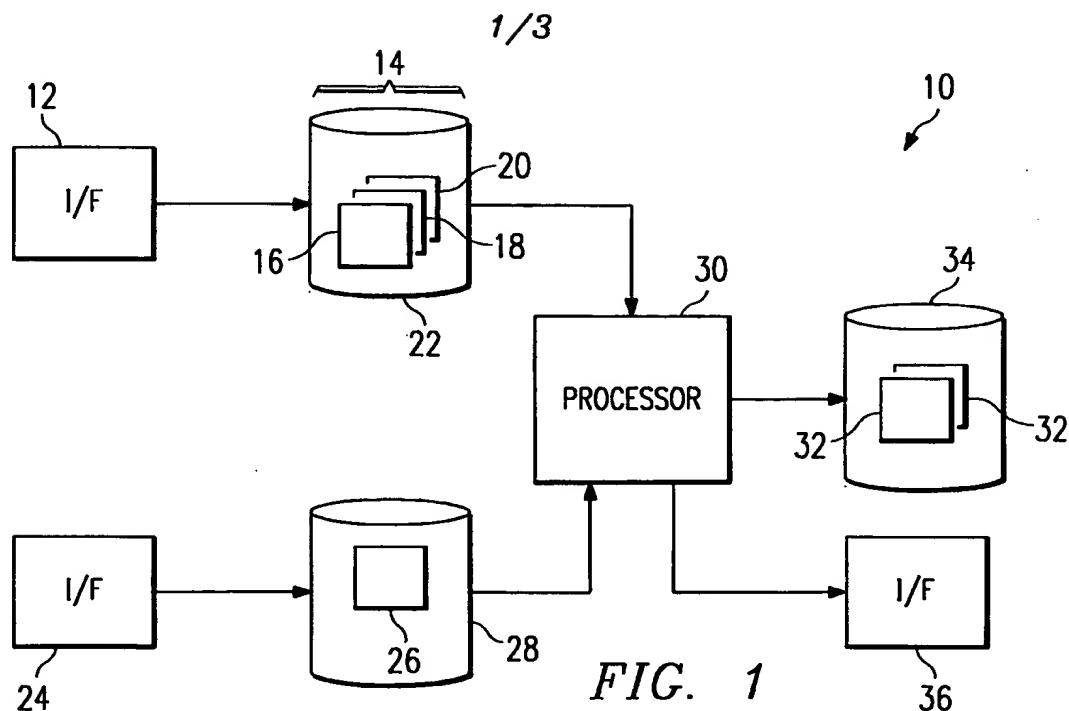
13. A system for coordinating a candidate for employment with potential employers, the system comprising:

an interface operable to receive candidate information and requirement information, the candidate information specifying at least one qualification for the candidate, the requirement information specifying at least one requirement for each of a plurality of available positions being offered by the potential employers; and

a processor coupled to the interface, the processor operable to generate match information in response to the candidate information and the requirement information.

14. The system of Claim 13, wherein the match information comprises a list of all available positions for which the candidate is qualified.

15. A method for coordinating a potential employer and a candidate for employment, comprising the steps of:
 - receiving candidate information at an interface, the candidate information specifying at least one qualification of the candidate;
 - receiving requirement information at the interface, the requirement information specifying at least one requirement for an available position being offered by the potential employer; and
- 10 comparing the candidate information with the requirement information using a processor in order to determine whether the candidate is suitable for the available position.
- 15 16. The method of Claim 15, further comprising the step of storing the candidate information and the requirement information in a memory.
- 20 17. The method of Claim 15, further comprising the step of generating match information.
- 25 18. The method of Claim 17, further comprising the step of configuring the match information in a format selected by a user.
- 30 19. The method of Claim 15, wherein at least one of the steps of receiving candidate information and receiving requirement information comprises the step of receiving over a computer-telephone interface.
20. The method of Claim 15, wherein the step of receiving candidate information comprises the step of receiving using an artificial intelligence engine interface.



2/3

FIG. 3

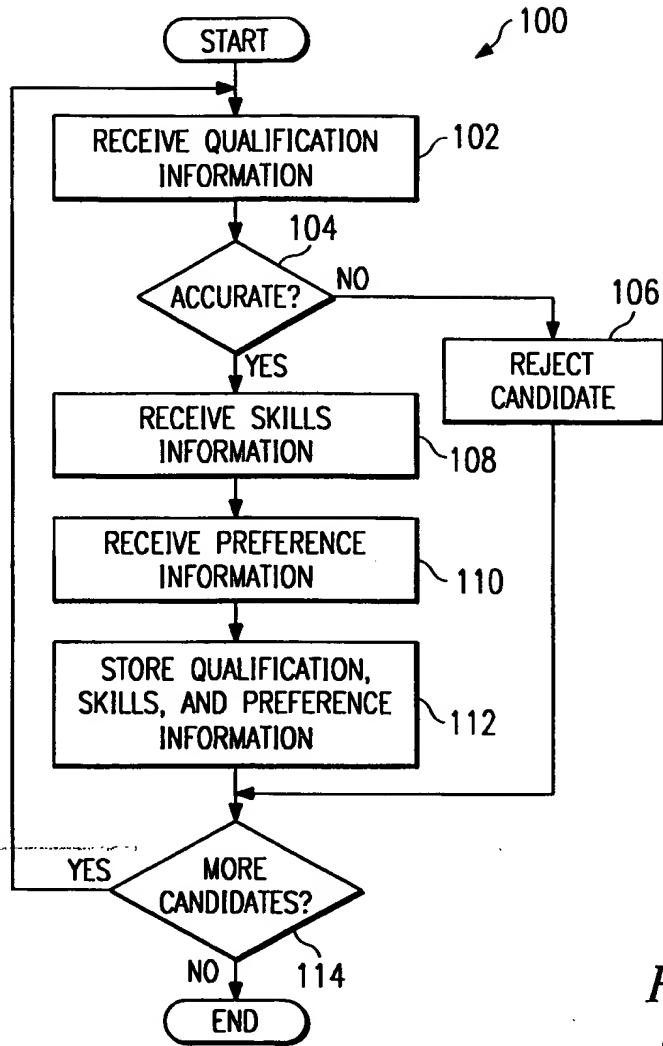
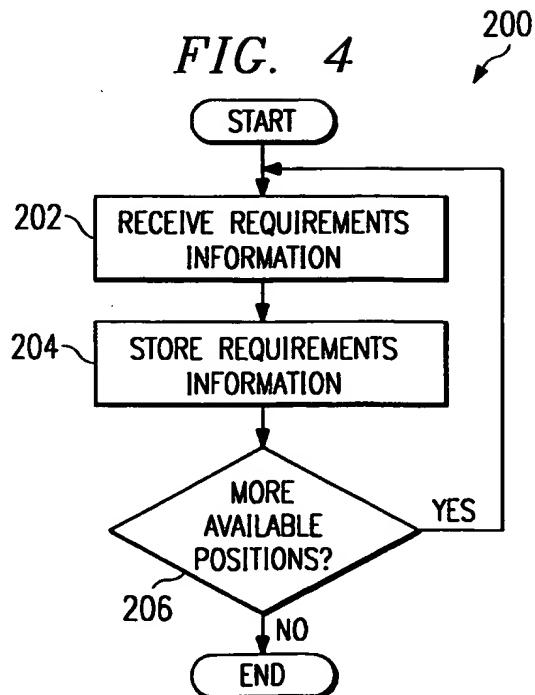
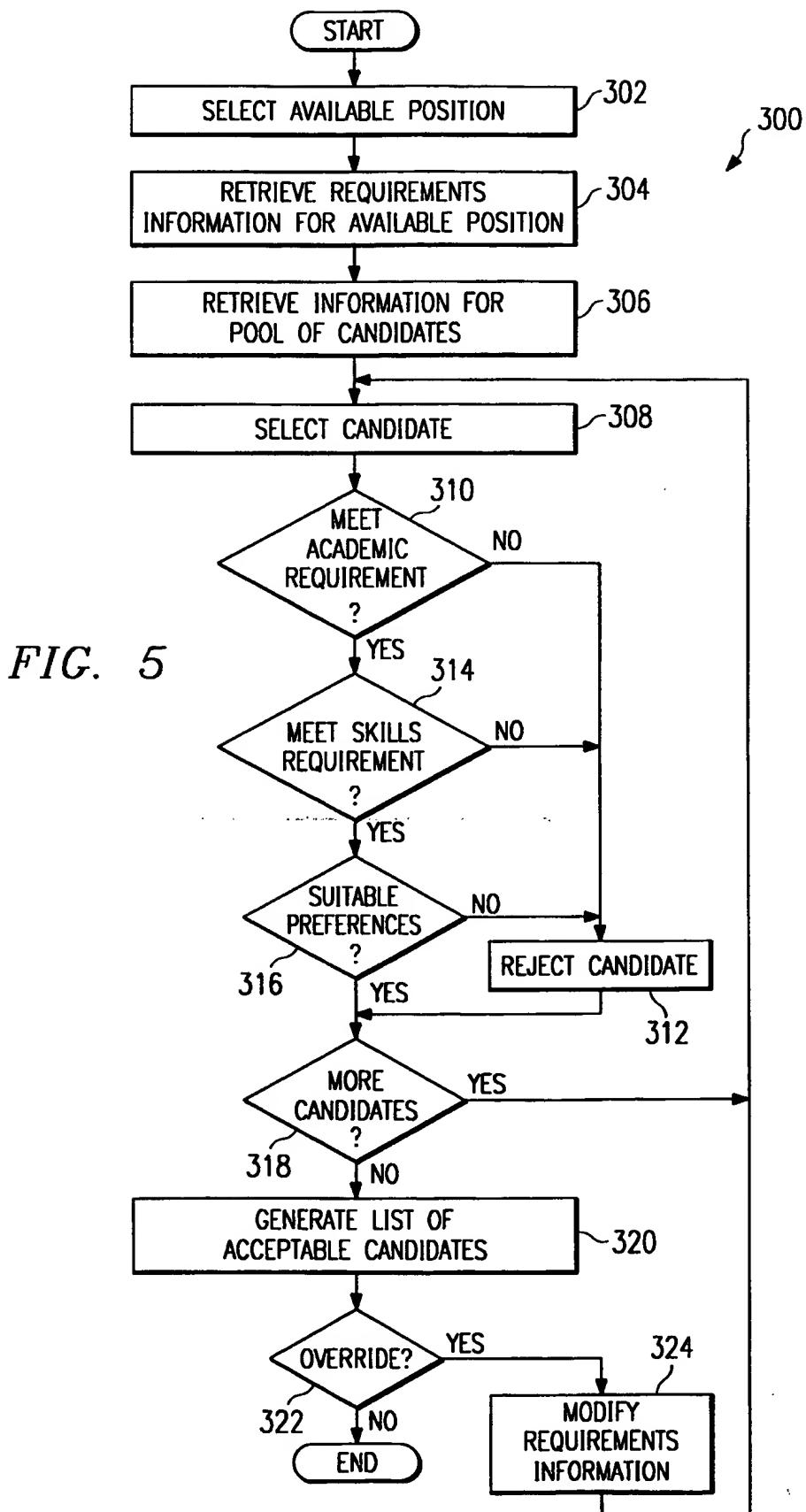


FIG. 4



3/3



INTERNATIONAL SEARCH REPORT

Intern. Appl. No.

PCT/US 98/03495

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 G06F17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 164 897 A (CLARK NEIL M ET AL) 17 November 1992 see claims 1-3 see column 2, line 30 - line 68 see column 3, line 46 - column 10, line 40; figures 1A-1D	1-20
X	HADDUCK C G: "An employment applications information system" AEDS-81 CONVENTION PROCEEDINGS. EXPLORING WITH COMPUTERS IN VIKINGLAND, MINNEAPOLIS, MN, USA, 5-8 MAY 1981, 1981, WASHINGTON, DC, USA, ASSOC. EDUC. DATA SYST, USA, pages 107-111, XP002067491 see abstract see page 107 - page 109	1-20

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

9 June 1998

Date of mailing of the international search report

22/06/1998

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Suendermann, R

INTERNATIONAL SEARCH REPORT

International Application No PCT/US 98/03495

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EUSTACE P: "The computer recruiter" ENGINEER, 31 OCT. 1985, UK, vol. 261, no. 6762, ISSN 0013-7758, page 21 XP002067492 see column 1 - column 3	1,9,13, 15
A	US 4 974 191 A (AMIRGHODSI SIAMAK ET AL) 27 November 1990 see abstract; claims 1,18 see column 2, line 15 - line 30 see column 3, line 1 - line 66	8,20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 98/03495

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5164897 A	17-11-1992	NONE	
US 4974191 A	27-11-1990	NONE	